

GAS POWERED POLESAW/PRUNER 1 HP

Model 95283

ASSEMBLY AND OPERATING INSTRUCTIONS



Do to continuing improvements, actual product may differ slightly from the product described herein.

CAUTION! Your Warranty Is Voided If:

You do not operate the Polesaw/Pruner with the proper 50:1 fuel mix in its fuel tank.

Never run the Engine with an improper fuel mix, low or no fuel mix.

Running the Engine with an improper fuel mix, low or no fuel mix, will permanently damage the unit.



3491 Mission Oaks Blvd., Camarillo, CA 93011 Visit our Web site at: http://www.harborfreight.com

TO PREVENT SERIOUS INJURY,
READ AND UNDERSTAND ALL WARNINGS
AND INSTRUCTIONS BEFORE USE.

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For technical questions, please call 1-800-444-3353.

PRODUCT SPECIFICATIONS

Item	Description		
Engine Specifications	1 HP / 26cc / Single Cylinder / 2-Stroke		
	Fuel Required: 50:1 Unleaded Fuel & 2 Cycle Oil Mixture		
	Fuel Tank Capacity: 0.2 Gallon		
	Noise Level: 102 dB @ 3 Feet		
Drive Type	Lever Operated Clutch System		
Chain/Bar Type	Oregon Chain & Bar / Double Guard / Low Kickback		
	3/8" Pitch with 39 Drive Link Count		
Chain Oiler	Built Into Base of Chain Head Attachment		
Recommended Chain Oil	S.A.E. 30 (Below 34° Fahrenheit) / S.A.E. 40 (Above 75° Fahrenheit)		
Pole Height	8 Feet (Including 10" Bar)		
Construction	Main Poles: Steel Tubing		
	Chain Bar: Stamped and Formed Steel		
	Chain: Machined High Carbon Steel		
	Guards/Trim: Multi-Colored High Impact Plastic		
Spark Plug	NHSP L8RTF, Gap = 0.5~0.7mm (.0197~.0275inch)		
Net Weight	12.13 Pounds		

This product requires a 50:1 ratio of fuel and 2-cycle oil to be added to its fuel tank before starting. Attempting to start the Engine with an improper fuel mix, low or no fuel mix <u>WILL</u> ruin the Engine and void the warranty.

The Engine's Carburetor may need to be adjusted by a qualified mechanic for efficient high-altitude use.

The Emission Control System for this product's engine is warranted for standards set by the U.S. Environmental Protection Agency. For warranty information, refer to the last pages of this manual.

SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

GENERAL SAFETY RULES AND PRECAUTIONS

WARNING!
READ AND UNDERSTAND ALL INSTRUCTIONS
Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury.

SAVE THESE INSTRUCTIONS

WORK AREA

- 1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
- 2. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create

- sparks which may ignite the dust or fumes.
- 3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control. Provide barriers or shields as needed.

PERSONAL SAFETY

- 1. Stay alert. Watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- 2. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- 3. Avoid accidental starting. Be sure the Power Switch is in its "OFF" position before moving the Polesaw/Pruner *and* before performing any service, maintenance, or cleaning procedures on the unit.
- 4. Remove adjusting keys or wrenches before turning the Polesaw/Pruner on.
 A wrench or a key that is left attached to a rotating part of the machine may result in personal injury.
- 5. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the power tool in unexpected situations.

TOOL USE AND CARE

- 1. **Do not force the tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
- Do not use the Polesaw/Pruner if the Power Switch does not turn it on or off. Any tool that cannot be controlled with its power switch is dangerous and must be replaced.
- 3. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- 4. **Maintain tools with care.** Properly maintained tools are less likely to malfunction and are easier to control. Do not use a damaged tool. Tag damaged tools "**Do not use**" until repaired.

- 5. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- Use only accessories that are recommended by the manufacturer for your 6. **model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.

SERVICE

- 1. Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
- 2. When servicing a tool, use only identical replacement parts. Follow instructions in the "Inspection, Maintenance, And Cleaning" section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES AND PRECAUTIONS

MPORTANT! Your Warranty is voided if: 1.

> You do not operate the Polesaw/Pruner with the proper 50:1 fuel mix in its fuel tank. Never run the Engine with an improper fuel mix, low or no fuel mix. Running the Engine with an improper fuel mix, low or no fuel mix, will permanently damage the unit.

- 2. Maintain labels and nameplates on the Polesaw/Pruner. These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- **WARNING!** Always wear safety equipment. When operating the Polesaw/Pruner, always wear ANSI approved safety impact eye goggles, hearing protection, heavy duty work gloves, sturdy work boots, and head protection.
- 4. Never leave the Polesaw/Pruner unattended when it is running. Turn off the Engine before leaving.
- 5. Never allow children in the work area with the danger of falling debris and a power tool in operation.

- 6. Always plan carefully where a tree limb will fall to avoid damage to property and/or personal injury.
- 7. **Never stand directly beneath the limb you are cutting.** Always stand well off to the side.
- 8. Do not use the Polesaw/Pruner to cut anything except tree limbs and brush.
- 9. Always maintain a firm grip on the Polesaw/Pruner with both hands.
- 10. **Branch trimming is a dangerous activity.** The use of this Polesaw/Pruner requires that you be in good physical condition, and with good balance and coordination. If you are in doubt about the safety issues involved, have a qualified, certified, arborist/tree surgeon do the work for you.
- 11. Always keep hand, fingers, and body a safe distance away from the moving Chain.
- 12. Do not use the Polesaw/Pruner if the Chain is dull.
- 13. Make sure the wood being cut does not contain foreign materials such as nails, spikes, etc.
- 14. **WARNING!** Ladders are inherently dangerous. NEVER use a ladder when using the Polesaw/Pruner.
- 15. WARNING! Stay clear of engine components which will be hot during and after operation.

KICKBACK PRECAUTIONS

- 1. **Kickback is a dangerous reaction that can lead to serious injury.** Kickback may occur when the moving Chain contacts an object at the upper portion of the tip of the Guide Bar or when the wood closes in and pinches the Saw Chain in the cut.
 - Contact at the upper portion of the tip of the Guide Bar can cause the Chain to dig into the wood and stop the Chain for an instant. The result is a quick, reverse reaction which kicks the Guide Bar up and back toward the operator. If the Chain is pinched along the top of the Guide Bar, the Guide Bar can be driven rapidly back toward the operator. Either of these reactions can cause loss of Polesaw/Pruner control which can result in serious injury.
 - Do not rely only upon the safety devices built into the Polesaw/Pruner. As an operator, you should take several steps to keep the cutting job free from accident or injury:
 - **A.** Make sure the area in which you are cutting is free from obstructions. Do

not allow the nose of the Guide Bar to contact a log, branch, fence, or any other obstruction while you are operating the tool.

- **B.** Always cut with the Engine running at full speed. Fully squeeze the Throttle and maintain a steady cutting speed.
- **C.** Always keep the Chain clean and sharp.
- **D.** Keep all guards and safety devices in proper working order and properly adjusted.
- **E.** Never use the Polesaw/Pruner on a ladder or unstable support.
- **F.** Before starting the Engine, make sure the Chain is not contacting any object.
- **G.** Shut off the Engine, and make sure the Chain has stopped before setting the tool down.

ELECTRICAL PRECAUTIONS

- 1. To protect yourself from electrocution, do not operate the Polesaw/ Pruner within 50 feet of any overhead electrical lines.
- 2. NEVER use the Polesaw/Pruner in damp or wet conditions.

CARBON MONIXIDE PRECAUTIONS

1. **MARNING!** This Polesaw/Pruner is designed for outdoor use only. Do not operate the Polesaw/Pruner in a closed area or in a poorly ventilated area. When running, the Engine of this product produces carbon monoxide, a colorless, odorless, toxic gas that, when inhaled, can cause serious personal injury or death.

FIRE AND EXPLOSION PRECAUTIONS

- Gasoline fuel and fumes are flammable, and potentially explosive.

 Use proper fuel storage and handling procedures. Always have multiple ABC class fire extinguishers nearby.
- 2. Keep the Polesaw/Pruner and surrounding areas clean at all times.
- 3. When spills of fuel or oil occur, they must be cleaned up immediately.

- Dispose of fluids and cleaning materials as per any local, state, or federal codes and regulations. Store oil rags in a covered metal container.
- 4. Never store fuel or other flammable materials near the Polesaw/Pruner.
- 5. Do not smoke, or allow sparks, flames, or other sources of ignition around the Polesaw/Pruner.
- 6. Keep grounded conductive objects, such as tools, away from exposed, live electrical parts and connections to avoid sparking or arcing. These events could ignite fumes or vapors.
- 7. **Do not refill the Fuel Tank while the Engine is running or while the Engine is still hot.** Do not operate the Polesaw/Pruner with known leaks in the fuel system.
- 8. Use only Engine manufacturer recommended fuel and oil.

MECHANICAL PRECAUTIONS

- 1. Prior to performing service, maintenance, or cleaning procedures, always make sure the Power Switch is in its "OFF" position. Allow the Engine to completely cool. Then, remove the spark plug from the Engine.
- 2. Do not alter or adjust any part of the Polesaw/Pruner or Engine that is assembled and supplied by the manufacturer.
- 3. Always follow and complete scheduled Polesaw/Pruner and Engine maintenance.

CHEMICAL PRECAUTIONS

- 1. Avoid contact with hot fuel, oil, exhaust fumes, and solid surfaces.
- 2. Avoid body contact with fuels, oils, and lubricants used in the Polesaw/
 Pruner and Engine. If swallowed, seek medical treatment immediately. Do not induce vomiting if fuel is swallowed. For skin contact, immediately wash with soap and water. For eye contact, immediately flush eyes with clean water.

NOISE PRECAUTIONS

Prolonged exposure to high noise levels is hazardous to hearing.
 Always wear ANSI approved hearing protection when operating or working

around the Polesaw/Pruner when it is running.

MISC. PRECAUTIONS

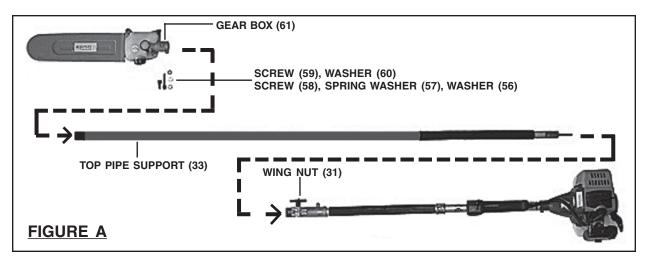
- 1. **DANGER!** We recommend that people with pacemakers not use this tool. This tool produces strong electromagnetic fields that can cause interference to or failure of the pacemaker. People with pacemakers should consult their physician(s) for advice.
- 2. **WARNING!** The warnings and precautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

UNPACKING

When unpacking, check to make sure all the parts shown on the **Parts Lists on pages 18** and **20** are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

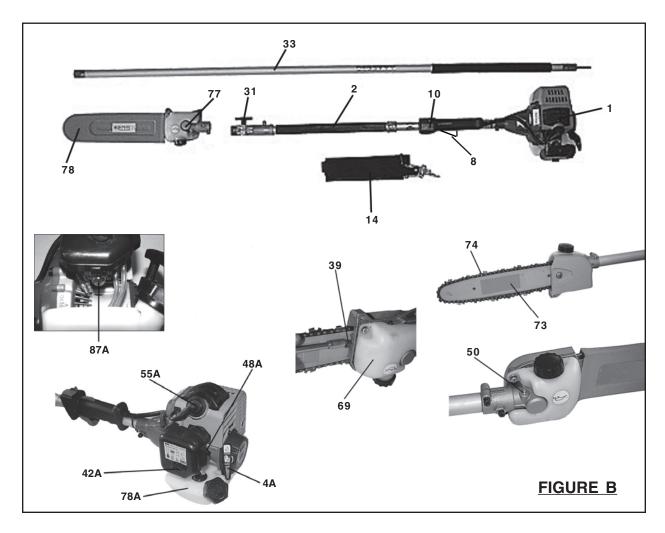
ASSEMBLY INSTRUCTIONS

- 1. Insert the Gear Box (61) onto the upper section of the Top Pipe Support (33). Then secure the Gear Box to the Top Pipe Support using one *short* Screw (59), one Washer (60), one *long* Screw (58), one Spring Washer (57), and one Washer (56). (See Figure A.)
- 2. Insert the lower section of the Top Pipe Support (33) into the Connector (22). Then secure the Top Pipe Support to the Connector by firmly tightening the Wing Nut (31). **(See Figure A.)**



PRODUCT FEATURES

- 1. **Top Pipe Support (33):** Prior to using the Polesaw/Pruner, always check to make sure all other connecting parts are firmly secured to the Top Pipe Support. **(See Figure B.)**
- 2. **Guard Bar Cover (78):** Make sure to remove the Guard Bar Cover prior to operating the Polesaw/Pruner. When not in use, keep the Guard Bar and Chain protected with the Guard Bar Cover. **(See Figure B.)**
- 3. **Chain Saw Cover (77):** The Chain Saw Cover allows access when replacing the Guard Bar (73) and/or Chain (74). The Chain Saw Cover is held in place with one Nut (75). Prior to starting the Polesaw/Pruner, always check to make sure the Nut is tightened securely. **(See Figure B.)**
- 4. **Wing Nut (31):** Prior to each use of the Polesaw/Pruner, make sure the Wing Nut is firmly tightened in order to properly secure the Top Pipe Support (33) to the unit. **(See Figure B.)**



- 5. **Bottom Pipe Support (2):** Always hold the Polesaw/Pruner firmly with both hands. Keep your left hand on the front portion of the Bottom Pipe Support and your right hand on the rear portion of the Bottom Pipe Support, so that your body is to the left of the chain line. Never use a left-handed (cross-handed) grip or any stance which would place your body or arm across the chain line. **(See Figure B.)**
- 6. **Power Switch (10)/Throttle Lever (8):** The Power Switch is a simple "**ON**"/ **OFF**" rocker type switch. Squeezing the Throttle Lever controls the speed at which the tool runs. (**See Figure B.**)
- 7. **Engine Assembly:** The Polesaw/Pruner features a 1 Horsepower, 26cc, single cylinder, 2-stroke Engine. Do not attempt to start or run the Engine with out adding the proper 50:1 ratio of fuel and 2-cycle oil in the Engine's Fuel Tank (78A). When in use, use caution to avoid touching the hot parts of the Engine. (See Figure B, and refer to the "Pre-Start Instructions" section of this manual.)
- 8. **Shoulder Harness (14):** Always wear the Shoulder Harness for increased safety and to support the Polesaw/Pruner. **(See Figure B.)**
- 9. **Primer (87A):** The Engine (1), *when cold*, must be primed with fuel prior to to starting the unit. To do so, simply press inward on the Primer three to four times with your index finger. Then, proceed with starting the unit. (See Figure B.)
- 10. Chain Tension Adjusting Screw (39): The Chain (74) is properly tensioned when there is no slack on the underside of the Guard Bar (73). The Chain should be snug, but should turn by hand without binding. To adjust the tension of the Chain, turn off the Engine (1). Slightly loosen the Nut (75) on the Chain Saw Cover (77). Remove all slack from the Chain by turning the Chain Tension Adjusting Screw clockwise, making sure the Chain seats into the Bar Guard groove during tensioning. Lift the tip of the Bar Guard up to check for sag. Release the tip of the Bar Guard, and turn the Chain Tensioning Screw 1/2 turn clockwise. Repeat this process until sag does not exist. Then, retighten the Nut. NOTE: If the Chain is too tight, it will not rotate. Loosen the Nut slightly and turn the Chain Tension Adjusting Screw 1/4 turn counterclockwise. Lift the tip of the Bar Guard up to check for proper tension. Then retighten the Nut. (See Figure B.)
- 11. Saw Chain (74): To avoid possible injury, never touch or adjust the Chain while the Engine (1) is running. The Chain is very sharp. Always wear heavy duty work gloves when performing maintenance to the Chain. Adjust the Chain tension only when the Chain is cold. Chain tensioning while warm may be too tight upon cooling. IMPORTANT: The cutters on the top of the Guard Bar should face toward the Guard Bar tip, in the direction of the chain rotation. (See Figure B.)

- 12. Guard Bar (73): Always place the Guard Bar Cover (78) on the Guard Bar when transporting or storing the Polesaw/Pruner. The Guard Bar Cover fits snugly onto the Guard Bar and must be attached carefully due to the sharp teeth of the Saw Chain (74). Always wear heavy duty work gloves when installing the Guard Bar Cover. (See Figure B.)
- 13. Oil Tank (69): Refer to the "Pre-Start Instructions" section in this manual for full details. (See Figure B.)
- 14. Gear Box Grease Fitting (50): The Drive Gear (44) assembly should be filled (through the Gear Box Grease Fitting) with clean, new, automotive axle grease every three months or 50 hours of tool use. (See Figure B.)
- 15. **Spark Plug (55A):** The condition of the Spark Plug should be checked every six months or 100 hours of tool use. If necessary, clean or replace the Spark Plug. **ALWAYS** remove the Spark Plug prior to performing any inspection, maintenance, or cleaning of the Polesaw/Pruner. (See Figure B.)
- 16. Choke Lever (48A): The Choke Lever must be set to its "START" position when starting a cold Engine (1). Once started, move the Choke Lever to its "RUN" position. When starting a warm Engine, make sure the Choke Lever is in its "RUN" position. (See Figure B.)
- Air Filter (42A): The Air Filter should be checked prior to each use of the 17. Polesaw/Pruner for excessive dirt and debris build-up. Thereafter, the Air Filter should be cleaned or replaced every three months or 50 hours of tool use. (See Figure B.)
- 18. Fuel Tank (78A): The Fuel Tank will hold up to 0.2 gallon of fuel. Always make sure the Fuel Cap (74A) is securely replaced after filling the Fuel Tank. NEVER attempt to fill the Fuel Tank when the Engine (1) is running or hot to the touch. Refer to the "Pre-Start Instructions" section in this manual for full details on filling the Fuel Tank with the proper unleaded fuel/2-cycle oil mixture. (See Figure B.)
- 19. Starter Handle (4A): Refer to the "To Start The Polesaw/Pruner" section in this manual for full details. (See Figure B.)

PRE-START INSTRUCTIONS

To Fill The Chain Oil Tank:

SKU 95283

Prior to each use of the Polesaw/Pruner, the Chain Oil Tank (69) must be filled 1. with S.A.E. 30 weight oil (below 34° Fahrenheit) or S.A.E. 40 weight oil (above 75° Fahrenheit). (See Figure B.)

- 2. Remove the Chain Oil Tank Cap (67) and carefully fill the Chain Oil Tank (69). Then, replace the Chain Oil Tank Cap and tighten securely. (See Figure B.)
- 3. **NOTE:** Do not use dirty, used, or otherwise contaminated oil. Damage may occur to the Oil Pump (47), Guard Bar (73), or Saw Chain (74). **(See Figure B.)**

To Fill The Fuel Tank:

- 1. IMPORTANT! Your warranty is voided if:
 You do not operate the Polesaw/Pruner with the proper 50:1 fuel mix in its
 Fuel Tank (78A). Never run the Engine (1) with an improper fuel mix, low or no
 fuel mix. Running the Engine with an improper fuel mix, low or no fuel mix will
 permanently damage the unit. (See Figure B.)
- 2. To obtain the proper 50:1 fuel mix, combine 50 parts unleaded gasoline with 1 part 2-cycle oil in a clean, approved container. Cover and shake to thoroughly mix before each fueling. **NOTE:** Mix only enough fuel for a few days work. The maximum storage time of mixed fuel is *three* months.
- 3. Once the proper fuel mix is obtained, remove the Fuel Cap (74A). Fill the Fuel Tank (78A) approximately 3/4 full with the fuel mix (the Fuel Tank capacity is 0.2 gallon). Then, replace the Fuel Cap. (See Figure B.)
- 4. **WARNING! NEVER** attempt to fill the Fuel Tank (78A) when the Engine (1) is running or hot to the touch.

OPERATING INSTRUCTIONS

To Start The Polesaw/Pruner:

- 1. **NARNING!** Always wear safety equipment. When operating the Polesaw/Pruner, always wear ANSI approved safety impact eye goggles, hearing protection, heavy duty work gloves, sturdy work boots, and head protection.
- 2. Check to make sure the Power Switch (10) is in its "OFF" position. (See Figure B.)
- 3. Remove the Guard Bar Cover (78) from the unit. Place the Polesaw/Pruner on a flat, level, ground surface, making sure the Saw Chain (74) does not come in contact with any objects on the ground. (See Figure B.)
- 4. Set the Choke Lever (48A) to the appropriate position:
 - A. "START" if the Engine (1) is cold. (See Figure B.)
 - B. "RUN" if the Engine (1) is warm. (See Figure B.)

- 5. With your index finger, pressed firmly on the Primer (87A) three or four times. (See Figure B.)
- 6. Turn the Power Switch (10) to its "ON" position. (See Figure B.)
- 7. Squeeze the Throttle Lever (8). (See Figure B.)
- 8. Hold the Bottom Pipe Support (2) with your left hand, and place your right foot on the rear section of the Engine (1). Firmly press the Polesaw/Pruner to the ground, making sure the Saw Chain (74) does not come in contact with any objects on the ground. (See Figure B.)
- 9. Hold the Starter Handle (4A) securely, and slowly pull out the Starter Rope (7A) for a short distance. Then, pull out the Starter Rope quickly. (See Figure B.)
- 10. If the Engine (1) does not start, press the Primer (87A) again and attempt to start the Engine. (See Figure B.)
- 11. If the Engine (1) runs for a short while, but does not continue running, press the Primer (87A) again. Move the Choke Lever (48A) to its "RUN" position and restart the Engine. (See Figure B.)
- 12. As soon as the Engine (1) is running, check to make sure the Choke Lever (48A) is in its "RUN" position. Squeeze the Throttle Lever (8) briefly and let up. The Throttle Lever will revert to its original position, causing the Engine to idle. (See Figure B.)
- 13. **NOTE:** If the Engine (1) is new, or has been stored for a long period of time, pull the Starter Handle (4A) several times to ensure sufficient fuel is delivered into the fuel line and combustion chamber of the Engine. (See Figure B.)
- 14. **WARNING!** The Saw Chain (74) should never turn at idle. If necessary, turn the Idle Screw of the Carburetor counterclockwise to reduce the idle RPM and stop the Chain, or immediately discontinue using the Polesaw/Pruner and contact a qualified service technician to make the adjustment.

To Stop The Polesaw/Pruner:

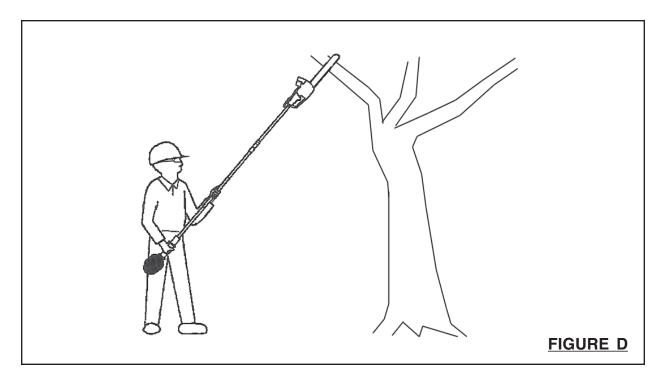
1. Let up on the Throttle Lever (8). Then turn the Power Switch (10) to its "**OFF**" position. (See Figure B.)

To Operate The Polesaw/Pruner:

1. Maintain a proper grip on the Polesaw/Pruner whenever the Engine (1) is

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running. Hold the tool with both hands. Always keep your left hand on the forward portion of the Bottom Pipe Support (2) and your right hand on the rear portion of the Bottom Pipe Support, so that your body is to the left of the chain line. Never use a left-handed (cross-handed) grip or any stance which would place your body or arm across the chain line. (See Figure D.)



- 2. Accelerate the Engine (1) to full throttle just before entering the cut by squeezing the Throttle Lever (8). To avoid the possiblity of kickback, keep the Engine (1) at full throttle the entire time you are cutting. (See Figure B.)
- 3. **DO NOT** use a back and forth sawing type motion for cutting.
- 4. Allow the Saw Chain (74) to cut for you. Exert only light downward pressure. If you attempt to force the cut, damage to the Guard Bar (73), Saw Chain (74), or Engine (1) can result. (See Figure B.)
- 5. Release the Throttle Lever (8) as soon as the cut is completed, allowing the Engine (1) to idle. **NOTE:** Running the Polesaw/Pruner at full throttle without a cutting load can cause unnecessary wear or damage to the Guard Bar (73), Saw Chain (74), or Engine (1). **(See Figure B.)**
- 6. **IMPORTANT:** After running the Polesaw/Pruner for an extended period of time, allow the Engine (1) to idle for several minutes to dissipate the heat. This will prevent some Engine parts (ignition system, piston rings, carburetor, etc.) from being damaged by overheating. Then turn the Power Switch (10) to its "**OFF**" position. (See Figure B.)

7. Before storing the Polesaw/Pruner, make sure to install the Guard Bar Cover (78) onto the Guard Bar (73). Drain all fuel out of the tool's Fuel Tank (78A). If this is not followed, old fuel in the Fuel Tank may clog the Carburetor and prevent the tool from starting until cleaned out. Then store the tool in a clean, dry, safe location out of reach of children and other unauthorized people. (See Figure B.)

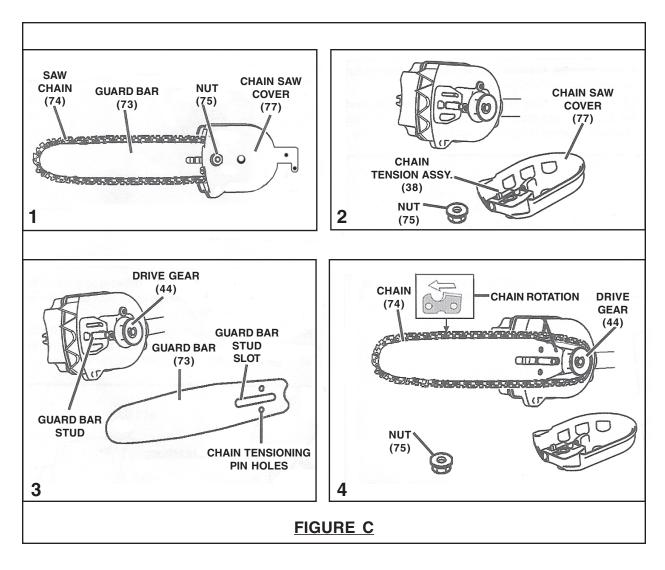
INSPECTION, MAINTENANCE, AND CLEANING

- 1. **WARNING!** Always make sure the Engine's Power Switch (10) is in its "**OFF**" position and the Spark Plug (55A) is removed prior to performing any service, maintenance, or cleaning of the Polesaw/Pruner. (**See Figure B.**)
- 2. **Before each use:** Inspect the general condition of the Polesaw/Pruner. Check misalignment or binding of moving parts, cracked or broken parts, dull or damaged Saw Chain (74) or Guard Bar (73), and any other condition that may affect the safe operation of the tool. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**
- 3. **Saw Chain (74) maintenance:** A dull, improperly sharpened, or damaged Saw Chain can cause kickback, leading to possible personal injury. It is recommended that only a qualified service technician attempt to sharpen or replace the Saw Chain.
- 4. **Spark Plug (55A) maintenance:** The condition of the Spark Plug should be checked every six months or 100 hours of tool use. If necessary, clean or replace the Spark Plug.
- 5. **Air Filter (42A) maintenance:** The Air Filter should be checked prior to each use of the Polesaw/Pruner for excessive dirt and debris build-up. Thereafter, the Air Filter should be cleaned or replaced every three months or 50 hours of tool use.
- 6. **Drive Gear (44) maintenance:** The Drive Gear assembly should be filled, through the Gear Box Grease Fitting (50), with clean, new, automotive axle grease every three months or 50 hours of tool use.
- 7. **To install a replacement Chain:** Turn the Chain Tension Adjusting Screw (39) counterclockwise to release tension. Using the accessory Hex Wrench (83), unscrew and remove the Nut (75) that secures the Chain Saw Cover (77) to the unit. The Guard Bar (73) contains a Guard Bar stud slot that fits over the Guard Bar stud. The Guard Bar also has two chain tensioning pin holes which fit over the chain tensioning pins. Place the Guard Bar onto the bar stud so that the chain tensioning pins fit into the chain tensioning pin holes. Fit the Chain over

the Drive Gear (44) and into the Guard Bar groove. The cutters on the top of the Guard Bar should face toward the Guard Bar tip, in the direction of the chain rotation. Replace the Chain Saw Cover and secure with the Nut. Tighten the Nut finger tight only to allow for tension adjustment.

Then, follow directions on **page 10** of this manual to properly adjust the Chain tension. (See Figure B, and Figure C.)

- 8. When storing the Polesaw/Pruner: Before storing, make sure to install the Guard Bar Cover (78) onto the Guard Bar (73). Drain all fuel out of the tool's Fuel Tank (78A). If this is not followed, old fuel in the Fuel Tank may clog the Carburetor and prevent the tool from starting until cleaned out. Then store the tool in a clean, dry, safe location out of reach of children and other unauthorized people.
- 9. CAUTION! All maintenance, service, or repairs not mentioned in this manual must only be performed by a qualified service technician.



TROUBLESHOOTING

Problem	Possible Cause	Possible Solution
Guard Bar and Chain running hot and smoking.	Chain tension too tight.	Re-adjust Chain Tension Adjusting Screw to lesson tension on Chain.
	2. Chain Oil Tank empty.	2. Refill Chain Oil Tank.
Engine runs, but Chain is not rotating.	Chain tension too tight.	Re-adjust Chain Tension Adjusting Screw to lesson tension on Chain.
	Damaged Guard Bar and/or Chain.	Have a qualified service technician repair or replace Guard Bar and/or Chain.
Chain rotates while Engine is at idle.	Engine idle speed set too high.	Have a qualified service technician reset Carburetor idle adjustment Screw to lower idle (RPM) speed.
Power Switch does not turn off Engine.	Defective Power Switch.	Immediately remove Spark Plug Cap from Spark Plug to stop Engine. Discontinue using Polesaw/ Pruner until the tool is repaired by a qualified service technician.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISKS AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

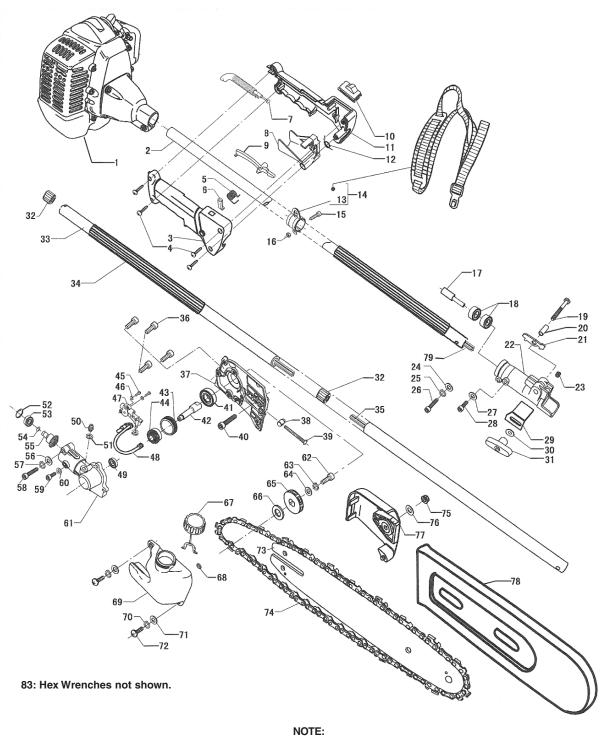
PARTS LIST - POLESAW/PRUNER UNIT

Part #	Description	Part #	Description
1	Engine Assembly	43	Washer
2	Pipe Support (Bottom)	44	Drive Gear
3	Control Lever (Left)	45	Screw
4	Screw	46	Spring Washer
5	Safety Lever Spring	47	Oil Pump
6	1/3 Throttle Lever	48	Oil Pipe
7	Connector (B)	49	Bearing
8	Throttle Lever	50	Gear Box Grease Fitting
9	Safety Lever	51	Washer
10	Power Switch	52	Washer
11	Control Lever (Right)	53	Bearing
12	Large Lever Spring	54	Washer (#9)
13	Hanger Assy.	55	Drive Gear
14	Shoulder Harness	56	Washer
15	Screw	57	Spring Washer
16	Nut	58	Screw
17	Transmission Cover	59	Screw
18	Bearing	60	Washer
19	Socket Head Bolt	61	Gear Box
20	Pipe Cover	62	Screw
21	Orientation Block	63	Spring Washer
22	Connector	64	Washer
23	Spring	65	Sprocket
24	Washer	66	Washer
25	Spring Washer	67	Chain Oil Tank Cap
26	Screw	68	Ventilator
27	Washer	69	Chain Oil Tank
28	Screw	70	Spring Washer
29	Safety Guard	71	Washer
30	Special Washer	72	Screw
31	Wing Nut	73	Guard Bar
32	Bearing	74	Saw Chain
33	Pipe Support (Top)	75	Nut
34	Plastic Pipe	76	Special Washer
35	Long Axis Transmission	77	Chain Saw Cover
36	Screw	78	Guard Bar Cover
37	Gear Box Cover	79	Transmission Short Axis
38	Tension Assy.	80	Screwdriver
39	Chain Tension Adjusting Screw	81	Spark Plug Wrench
40	Screw	82	Tool Pouch
41	Bearing	83	Hex Wrench (Qty. 2)
42	Drive Gear Axis		

NOTE:

Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

ASSEMBLY DIAGRAM - POLESAW/PRUNER UNIT



Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

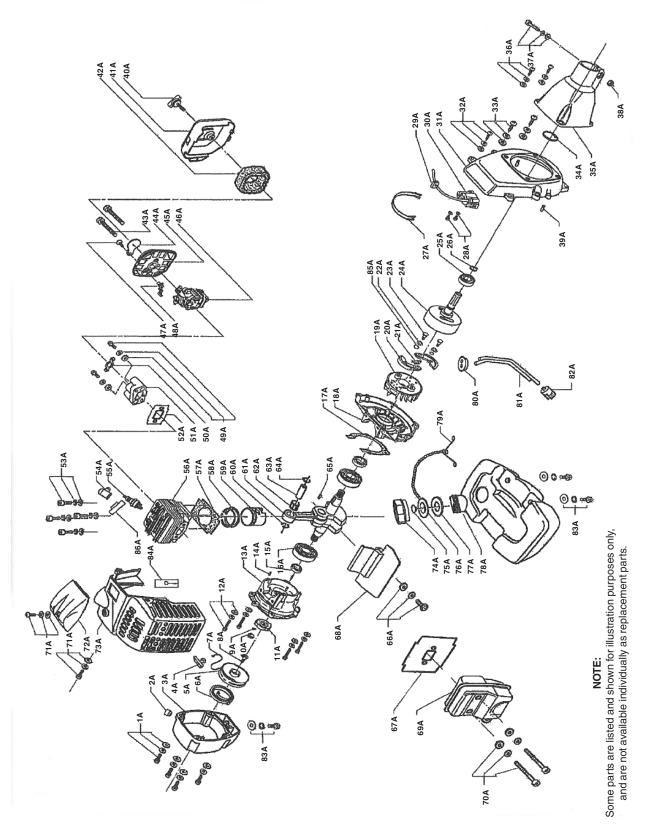
PARTS LIST - ENGINE

Part #	Description	Part #	Description
1A	Screw Set	45A	Air Filter Support
2A	Lead Rope Set	46A	Carburetor
3A	Starter Cover	47A	Screw
4A	Starter Handle	48A	Choke Lever
5A	Starter Pulley	49A	Screw Set
6A	Starter Spring	50A	Insulator Gasket
7A	Starter Rope	51A	Insulator Seat
8A	Screw	52A	Carburetor Gasket
9A	Starter Spring	53A	Inner Hex Bolt
10A	Back Stop	54A	Spark Plug Cap
11A	Starter Bowl	55A	Spark Plug
12A	Inner Hex Bolt	56A	Cylinder
13A	Rear Crankcase	57A	Cylinder Gasket
14A	Position Pin	58A	Piston Ring
15A	Rear Oil Seal	59A	Piston
16A	Ball Bearing	60A	Piston Pin Ring Snap
17A	Crankcase	61A	Crankshaft Assy.
18A	Front Crankcase	62A	Needle Bearing
19A	Flywheel	63A	Piston Pin
20A	Centrifugal Clutch	64A	Piston Pin Ring Snap
21A	Clutch Spring	65A	Woodruff Key
22A	Ripple Washer	66A	Screw Set
23A	Clutch Screw	67A	Muffler Gasket
24A	Clutch Drum	68A	Baffle
25A	Bearing	69A	Muffler
26A	Block	70A	Inner Hex Bolt
27A	Switch Wires	71A	Screw Set
28A	Screw Set	72A	Protection Cover
29A	Cable Retainer	73A	Engine Cover
30A	Ignition Coil	74A	Fuel Cap
31A	Flywheel Cover	75A	Air Vent
32A	Screw Set	76A	Plate
33A	Screw Set	77A	Rubber Gasket
34A	Card Spring	78A	Fuel Tank
35A	Clutch Cover	79A	Retainer
36A	Screw Set	80A	Hose Grommet
37A	Screw Set	81A	Fuel Hose
38A	Nut	82A	Fuel Filter
39A	Pin	83A	Screw Set
40A	Knob Screw	84A	Cable Retainer
41A	Air Filter Cover	85A	Flat Washer
42A	Air Filter	86A	Protection Cover
43A	Screw Set	86A	Protection Cover
44A	Choke Valve	87A	Primer

NOTE:

Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

ASSEMBLY DIAGRAM -ENGINE



Emission Control System Warranty

United States Emission Control Defects Warranty Statement

The United States Environmental Protection Agency (herein EPA), and Harbor Freight Tools® (herein HFT) are pleased to explain the emission control system warranty on your 1995 and later Small Off-Road Engine (herein engine). Within the United States, new off-road, spark-ignition engines certified for model year 1997 and later, must meet similar standards set forth by the EPA. HFT must warrant the emission control system on your engine for the periods of time described below, provided there has been no abuse, neglect or improper maintenance of your engine.

Your emission control system may include parts such as the carburetor or fuel-injection system, and the ignition system. Also included may be hoses, belts, connectors and other emission-related assemblies.

Where a warrantable condition exists, HFT will repair your engine at no cost to you including diagnosis, parts and labor.

Manufacturer's Warranty Coverage

The 1995 and later engines are warranted for two (2) years. If any emission-related part on your engine is defective, the part will be repaired or replaced by HFT.

Harbor Freight Tools Emission Control Defects Warranty Coverage

Engines are warranted for a period of two (2) years relative to emission control parts defects, subject to the provisions set forth below. If any emission related part on your engine is defective, the part will be repaired or replaced by HFT.

Owner's Warranty Responsibilities

- As the engine owner, you are responsible for the performance of the required maintenance listed in your Owner's Manual. HFT recommends that you retain all receipts covering maintenance on your engine, but HFT cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.
- As the engine owner, you should, however, be aware that HFT may deny you warranty coverage if your engine or a part has failed due to abuse, neglect, improper maintenance, or unapproved modifications.
- You are responsible for shipping your engine to a HFT warranty station as soon as a problem exists. Contact the HFT Customer Service department at the number below to make shipping arrangements. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities, you should contact the Harbor Freight Tools Customer Service Department at 1-800-444-3353.

Harbor Freight Tools Emission Control Defects Warranty Provisions

1. Length of Coverage

HFT warrants to a first retail purchaser and each subsequent purchaser that the engine is free from defects in materials and workmanship that cause the failure of warranted parts for a period of two (2) years after the date of delivery to the first retail purchaser.

2. No Charge Repair or Replacement

Repair or replacement of any warranted part will be performed at no charge to the owner if the work is performed through a warranty station authorized by HFT. For emissions warranty service, contact the HFT Customer Service Department at 1-800-444-3353.

3. Consequential Damages Coverage

Coverage under this warranty shall also extend to the failure of any engine components caused by the failure of any warranted part while it is still covered under this warranty.

4. Coverage Exclusions

Warranty claims shall be filed in accordance with the provisions of the HFT warranty policy explained in the box at the top of the previous page. HFT shall not be liable for any loss of use of the engine, for any alternative usage, for any damage to goods, loss of time, or inconvenience. Warranty coverage shall also be excluded for any part which fails, malfunctions, or is damaged due to failure to follow the maintenance and operating instructions set forth in the Owner's Manual including, but not limited to:

- (a) use of parts which are not authorized by HFT
- (b) improper installation, adjustment or repair of the engine or of any warranted part unless performed by an authorized warranty center
- (c) failure to follow recommendations on fuel use contained in the Owner's Manual
- (d) improper or inadequate maintenance of any warranted parts
- (e) repairs performed outside of the authorized warranty service dealers
- (f) alterations by changing, adding to or removing parts from the engine.

Emission Control System Warranty - continued

Harbor Freight Tools Emission Control Defects Warranty Provisions

5. Service and Maintenance

Component parts which are not scheduled for replacement as required maintenance or are scheduled only for regular inspection to the effect of "repair or replace as necessary" are warranted for the warranty period. Any warranted part which is scheduled for replacement as required maintenance is warranted for the period of time up to the first scheduled replacement point for that part. Any replacement part, provided it is equivalent in durability and performance, may be used in performance of maintenance or repairs. The owner is responsible for commissioning a qualified technician/mechanic to perform all required maintenance, as outlined in the **Inspection**, **Cleaning**, **and Maintenance** section on pages 15 and 16 of this manual.

6. Warranted Parts

1) Fuel Metering System

- Carburetor and its internal parts.
- ii) Fuel pump (if so equipped).
- iii) Cold start enrichment system.

2) Air Induction System

- i) Intake pipe/manifold.
- ii) Air cleaner.

3) Ignition System

- i) Spark plug.
- ii) Magneto ignition system.

4) Catalyst System (if so equipped)

- i) Exhaust pipe stud.
- ii) Muffler.
- iii) Catalytic converter (if so equipped).

5) Miscellaneous items Used in Above Systems

- i) Vacuum, temperature and time sensitive valves and switches.
- ii) Hoses, belts, connectors, and assemblies.

WARRANTY

